WE CLAIM:

1.   A composition comprising a protein in crystalline form wherein the protein has at least 90% identity with residues 143-438 of SEQ. ID No. 1.

2.   A composition according to claim 1 wherein the protein has at least 95% identity with residues 143-438 of SEQ. ID No. 1.

3.   A composition according to claim 1 wherein at least a portion of the protein comprises consecutively residues 143-438 of SEQ. ID No. 1.

4.   A composition according to claim 1 wherein the protein crystal diffracts X-rays for a determination of structure coordinates to a resolution greater than 3.0 Angstroms.

5.   A composition according to claim 1 wherein the protein crystal has a crystal lattice in a $P2_12_12_1$ space group.

6.   A composition according to claim 1 wherein the protein crystal has a crystal lattice having unit cell dimensions, +/- 5%, of a=48.36Å b=72.29Å and c=94.52Å, $\alpha=\beta=\gamma=90°$.

7.   A composition comprising AKT3 in crystalline form wherein the crystal has a crystal lattice in a $P2_12_12_1$ space group.

8.   A composition comprising AKT3 in crystalline form wherein the crystal has a crystal lattice having unit cell dimensions, +/- 5%, of a=48.36Å b=72.29Å and c=94.52Å, $\alpha=\beta=\gamma=90°$.

9.   A method for forming a crystal of a protein comprising:

        forming a crystallization volume comprising: a precipitant solution and a protein wherein the protein has at least 90% identity with residues 143-438 of SEQ. ID No. 1; and

        storing the crystallization volume under conditions suitable for crystal formation of the protein.

10.   A method according to claim 9 wherein the protein has at least 95% identity with residues 143-438 of SEQ. ID No. 1.

11.   A method according to claim 9 wherein at least a portion of the protein comprises consecutively residues 143-438 of SEQ. ID No. 1.

12.   A method according to claim 9 wherein the protein diffracts X-rays for a determination of structure coordinates to a resolution greater than 3.0 Angstroms.

13.   A method according to claim 9 wherein the protein crystal has a crystal lattice in a $P2_12_12_1$ space group.

14.   A method according to claim 9 wherein the protein crystal has a crystal lattice having unit cell dimensions, +/- 5%, of a=48.36Å b=72.29Å and c=94.52Å, $\alpha=\beta=\gamma=90°$.

15.   A method according to claim 9, the method further comprising diffracting the protein crystal to produce a diffraction pattern and solving the structure of the protein from the diffraction pattern.

16.   A composition comprising at least a portion of a protein expressed as a nucleic acid molecule that comprises SEQ. ID No. 2.

17.   A composition comprising an isolated protein consisting of SEQ. ID No. 3.

18.   A method of identifying an entity that associates with a protein comprising:
        taking structure coordinates from diffraction data obtained from a crystal of a protein that has at least 90% identity with SEQ. ID No. 3; and
        performing rational drug design using a three dimensional structure that is based on the obtained structure coordinates.

19.   A method according to claim 18 wherein the protein has at least 95% identity with SEQ. ID No. 3.

20.   A method according to claim 18 wherein the protein crystal has a crystal lattice having unit cell dimensions, +/- 5%, of a=48.36Å b=72.29Å and c=94.52Å, $\alpha=\beta=\gamma=90°$.

21.   A method according to claim 18 wherein the protein crystal has a crystal lattice in a $P2_12_12_1$ space group

22.   A method according to claim 18, the method further comprising selecting one or more entities based on the rational drug design and contacting the selected entities with the protein.

23.   A method according to claim 18, the method further comprising measuring an activity of the protein when contacted with the one or more entities.

24.   A method according to claim 18, the method further comprising comparing activity of the protein in a presence of and in the absence of the one or more entities; and selecting entities where activity of the protein changes depending whether a particular entity is present.

25.   A method according to claim 18, the method further comprising contacting cells expressing the protein with the one or more entities and detecting a change in a phenotype of the cells when a particular entity is present.